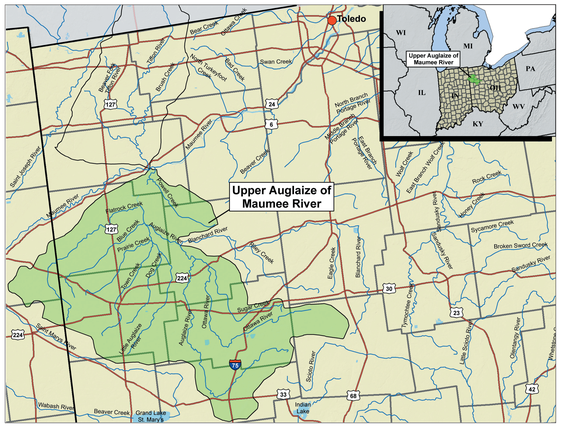
United States Department of Agriculture

Conservation Effects Assessment Project (CEAP)

Upper Auglaize Watershed, Ohio: 2004-2006

An NRCS* Special Emphasis Watershed, one of 24 CEAP watershed projects.



CEAP Assessment

Assess the effects of subsurface drainage and other related best management practices on water quality.

Watershed Description

The Upper Auglaize River watershed is a subwatershed of the Maumee River basin.

- 212,000 acres
- 83% of the watershed is tile drained
- 74.2% cropland, 10.8% grassland
- A Total Maximum Daily Load (TMDL) has been established for total phosphorus, dissolved oxygen, bacteria, and aquatic habitat.

Issues: Watershed contributes a significant amount of sediment to the Maumee River that is then transported to Toledo Harbor. Farm fields are extensively tile drained and the area has a very extensive network of drainage ditches. Intensive farming practices have stressed the habitat needs of wildlife.

*Natural Resources Conservation Service

Approach

Water sampling: Sediment, nutrients

Watershed models: AnnAGNPS (Annualized Agricultural Non-Point Source)

Water quality monitoring: Suspended sediment, nutrients, metals, and pesticides

Communicating Results

Report effects of conservation on erosion, yield, and loading; report effects of agricultural chemical fertilizer on pilot subarea; and report effects of fertilizer in full Upper Auglaize River watershed.

Collaborators

- USDA, Agricultural Research Service
- US Geological Survey
- Ohio Department of Natural Resources, Division of Soil and Water
- Ohio Environmental Protection Agency
- Allen, Auglaize, Van Wert & Putnam Soil and Water Conservation Districts
- Army Corps of Engineers
- University of Toledo
- Heidelberg College
- Ohio State University

Contacts

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NRCS State Conservationist
Terry Cosby

First Conservation Security Program contract signing ceremony.

Riparian buffer along waterway.

Young soybean plants thrive in the residue of a wheat crop. This form of no-till farming provides good protection for the soil from erosion and helps retain moisture for the new crop.

Timeline

2003
Initial funding

2004
August CEAP bibliographies

2005
May Wetlands peer review
July Wildlife literature review (program-based)
October Cropland literature reviews
Wildlife literature review (practice-based)
Wildlife Work Plan
November Wetlands Work Plan
December Draft findings—Prairie Pothole region

2006
February Preliminary habitat quality models—Prairie Potholes wetland region
March Preliminary National Assessment Report

2007
Fall National Assessment Final Report
Special Emphasis Watershed reports

www.nrcs.usda.gov/technical/nri/ceap/